

WHAT IS CLAIMED IS:

1. A semiconductor device comprising:  
a semiconductor chip;  
a plurality of conductive pads connected to the semiconductor chip with wires; and  
a sealing resin molding sealing the semiconductor chip, the wires and the conductive parts therein;  
wherein the respective back surfaces of the semiconductor chip and the conductive pads are exposed, and  
each of the conductive pads has a reduced part of a small size and a jutting part jutting out from the reduced part.
2. The semiconductor device according to claim 1, wherein  
the jutting part of each conductive pad lies on the inner side of the reduced part in the sealing resin molding.
3. The semiconductor device according to claim 1, wherein  
each of the conductive pads has a reduced part of a small size, and a pair of jutting parts formed on the opposite sides, respectively, of the reduced part.
4. A semiconductor device fabricating method comprising the steps of:  
preparing an adhesive sheet having a base sheet and an adhesive layer;  
forming a plurality of conductive pads on the adhesive layer of the adhesive sheet;  
placing semiconductor chips on the adhesive layer of the adhesive sheet and connecting the conductive pads to the semiconductor chips with wires;  
sealing the semiconductor chips, the conductive pads and the wires in a sealing resin molding on the adhesive sheet;  
separating the adhesive sheet from the sealing

resin molding; and

cutting the sealing resin molding into packages respectively including the semiconductor chips;

wherein the step of forming the conductive pads on the adhesive layer includes the steps of: forming a plated nickel layer and a plated noble metal layer in layers at least on one of the surfaces of a metal foil, placing the metal foil provided with the plated nickel layer and the plated noble metal layer on the adhesive layer of the adhesive sheet, and etching the metal foil by using the plated nickel layer and the plated noble metal layer as a resist to form the conductive pads, each having a reduced part of the metal foil having a small size, and a jutting part of the plated nickel layer and the plated noble metal layer and jutting out from the reduced part.

5. The semiconductor device fabricating method according to claim 4, wherein

in the step of forming the conductive pads, each conductive pad is formed so as to have a reduced part of the metal foil having a small size and a pair of jutting parts of the plated nickel layer and the plated noble metal layer and formed on the opposite sides of the reduced part, by forming the plated nickel layer and the plated noble metal layer on each of both the surfaces of the metal foil.

6. The semiconductor device fabricating method according to claim 4, wherein

the step of forming the conductive pads further includes a step of shaping the adhesive sheet by press working after forming the conductive pads by etching the metal foil.

7. The semiconductor device fabricating method according to claim 4, wherein

the metal foil is formed of copper or a copper alloy and has a thickness in the range of 0.01 to 0.1 mm.

8. The semiconductor device fabricating method according to claim 4, wherein

the plated noble metal layer contains at least Au, Ag or Pd.

9. The semiconductor device fabricating method according to claim 4, wherein

the base sheet of the adhesive sheet has an elastic coefficient of 1.0 GPa or above at 200°C, and the adhesive layer has an elastic coefficient of 0.1 MPa or above at 200°C.

10. The semiconductor device fabricating method according to claim 4, wherein

the adhesive layer of the adhesive sheet is formed of a thermosetting adhesive, has an elastic coefficient of 0.1 MPa or below at temperatures in the range of 100°C to 150°C before hardening, and an elastic coefficient of 0.1 MPa or above at 200°C after hardening.

11. The semiconductor device fabricating method according to claim 10, wherein

the thermosetting adhesive contains, as essential components, an epoxy resin, an epoxy curing agent and an elastic material.

12. The semiconductor device fabricating method according to claim 4, wherein

adhesive strength bonding the conductive pads and the adhesive layer of the adhesive sheet together is in the range of 0.1 to 15 N/20 mm.